5. (Amended) The coating composition of claim [4] 1, wherein [the] said biopolymer inhibits coagulation of blood [is derived from heparin-tridodecylmethylammonium chloride].

6. (Amended) The coating composition of claim [1] 5, wherein [the] said biopolymer is [derived from a complex] selected from the group consisting of heparin-tridodecylmethylammonium chloride, heparin-benzalkonium chloride, heparin-steralkonium chloride, heparin-poly-*N*-vinyl-pyrrolidone, heparin lecithin, heparin-didodecyldimethylammonium bromide, heparin-pyridinium chloride, and heparin-synthetic glycolipid complex.

7. (Amended) The coating composition of claim 1, wherein [the] said biopolymer comprises [has] at least one hydroxyl or amine functionality [functional groups that can react with isocyanate functionality].

8. The coating composition of claim [1] 5, wherein said [the] biopolymer is [comprises and adduct of] heparin [molecules] or a complex thereof.

11. (Amended) The coating composition of claim [1] 4, wherein [the] said biopolymer is [derived from] heparin-tridodecylmethylammonium chloride.

12. (Amended) The coating composition of claim [1] 8, further comprising at least one [of a] additive selected from the group consisting of wetting agents [agent], surface acting agents [agent] and film forming agents [and an additive].

13. (Amended) The coating composition of claim 6 [1], wherein said [the] silane [has an organic chain between isocyanate and silane functional groups] is 3-isocyanatopropyl-triethoxysilane.

~~14.~~ (Amended) A [coating for a] medical device [, wherein thromboresistance activity can be modified, comprising] having a coating comprising the product of the reaction of:

[heparin-tridodecylmethylammonium chloride
a silane having isocyanate functionality; and
an organic solvent]

a silane having at least one functional group selected from the group consisting of an isocyanate, an isothiocyanate, an ester, an anhydride, an acyl halide, an alkyl halide, an epoxide and an aziridine; and

a biopolymer.

~~16.~~ (Amended) The [coating] medical device of claim ~~14~~ [15], wherein the [concentration of the silane is between about one-tenth percent and about 20 percent] weight ratio of said silane to said biopolymer is from about 1:4 to about 2:1.

~~17.~~ (Amended) The [coating] medical device of claim [15] ~~16~~, wherein [the concentration of the silane is between about one-tenth percent and about ten percent] said weight ratio is 1:4, 1:1 or 2:1.

~~18.~~ (Amended) The [coating] medical device of claim [15] ~~16~~, wherein [the concentration of the silane is between about one-tenth percent and about five percent] said biopolymer is heparin or a complex thereof.

~~19.~~ (Amended) The [coating] medical device of claim [15] 18, wherein [the concentration of the silane is between about one-half percent and about four percent] said biopolymer is heparin-tridodecylmethylammonium chloride.

~~21.~~ (Amended) The [coating] medical device of claim [14] ~~16~~, further comprising at least one additive selected from the group consisting of wetting agents, [a] surface active agents [agent] and film forming agents.

~~28~~ 33. (Amended) The medical device of claim [29] ~~14~~, wherein [the] said device is selected from the group consisting of [a stent] stents, catheters, prostheses, tubing and blood storage vessels.

~~34~~. (Amended) The medical device of claim ~~33~~, wherein [the stent] said device is made of at least one material selected from stainless steel, nitinol, tantalum, glass, ceramic, nickel, titanium and aluminum.

35. (Amended) A method of [coating a medical device] preparing a coating on a substrate to be coated, comprising [covalently bonding a heparin to the medical device]:

(a) forming a mixture of (i) a silane having at least one functional group selected from the group consisting of an isocyanate, an isothiocyanate, an ester, an anhydride, an acyl halide, an alkyl halide, an epoxide and an aziridine; and (ii) a biopolymer; in a solvent;

(b) applying said mixture to said substrate; and

(c) curing said mixture on said substrate to form said coating.

37. (Amended) The method of claim [36] 35, wherein [the silane has] said functional group is an isocyanate [functionality].

38. (Amended) The method of claim 35, wherein [the] said biopolymer is heparin or a complex thereof [is derived from heparin-tridodecylmethylammonium chloride].

39. (Amended) The method of claim [36] 38, wherein said biopolymer is heparin-tridodecylmethylammonium chloride [further comprising: dissolving heparin-tridodecylmethylammonium chloride and the silane in an organic solvent prior to applying the solution to the substrate].

43. (Amended) The method of claim [42] 38, wherein the [concentration of the silane is between about one-tenth percent and about twenty percent] weight ratio of said silane to said biopolymer is from about 1:4 to about 2:1.